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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,096	07/30/2001	Maurice Clarence Kemp	MORN-0011 (108347.00022)	2612

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EXAMINER	
PRATT, HELEN F	

ART UNIT	PAPER NUMBER
1761	

DATE MAILED: 11/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/918,096	KEMP ET AL.
	Examiner	Art Unit
	Helen F. Pratt	1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 October 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-9,12,13,33,34 and 36-42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-9,12,13,33,34 and 36-42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's cancellation of claims 14-32 is acknowledged to non-elected claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2, 4-9, 12, 13, 33, 34, 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kemp et al. (WO 00/48469) or Iannotti et al. in view of Complete Course in Canning, p. 238 (Canning).

Kemp et al. disclose a method for preserving a nutriment as in claims 1 and 2 by combining the nutriment with a mixture of AGIIS and an additive (page 62, claims 54 and 55). The intended use of increasing the rate of thermal inactivation of a pathogen in a nutriment is seen to have occurred, as the method is the same. Kemp et al. disclose the treatment of chicken and shrimp (pages 44, and 45).

Iannnotti et al. disclose that it is known to treat meat such as ground meat with heat treated lactic or glycolic acid (abstract).

Kemp et al. and Iannotti et al. differ from claim 1 in that the treated nutriment (meat) is heated for a particular length of time. However, Canning discloses that it is known to heat- treat foods to inactivate pathogens and that the use of an acid decreases the heat treatment time (page 238, 3rd para.). Certainly, salmonella is a

primary target and any other well-known bacteria as claimed. Warnings are constantly made about fully cooking food to reduce bacteria. One knows that partial cooking of food cannot make the food, safe. Canning discloses a method of treating low-acid products with an acid. Meat is known to be a low acid food. The reference discloses that it would be impractical to sterilize low-acid products in boiling water unless the product is acidified (page 238, 3rd para. under Acidification). Also, the reference discloses on page 478 under "aiding preservation" that shorter times can be used for sterilization of foods when acidulents are used. It is seen that the rate of thermal inactivation of a pathogen in a nutriment (food) has been shown, since as above, less time is needed to sterilize when an acid is used thereby increasing the rate of thermal inactivation of a pathogen as in claim 1. The reference discloses particularly, tomatoes, as in claim 3 (page 477 2nd para under "Aiding Preservation"). Nothing new is seen in picking out a particular amount of time to inactivate 90% of the gram negative pathogens because that is what cooking does. The length of time to heat the meat would have been expected to have been less since Canning discloses that the use of acids and heat together decrease the length of time that the food needs to be heated. Therefore, it would have been obvious to heat uncooked meat as disclosed by Canning in the process of Kemp or Iannotti et al. for its known function of killing pathogens.

Claims 2, 4 and 5 further require that the acidulant is made of particular ingredients as in 2(a). The reference to Kemp et al. disclose the particular compounds on page 11, lines 5-20. The further limitations of the claims are disclosed through out the applicant's own reference. Claims 2, 4-13 differ from the reference in that they are

to a method of increasing the rate of thermal inactivation of a pathogen in a nutriment (food). However, as above, the reference to Canning, in particularly, discloses that acidulents are used to decrease the processing time when canning goods. Heat is always used in canning. Also, Kemp et al. disclose that when the composition is heated that the pH of the composition goes down, giving the potential of the composition to destroy microorganisms when heated (page 29, lines 5-15). Therefore, it would have been obvious to one of ordinary skill in the art to increase the rate of thermal inactivation of a pathogen in a nutriment (food) because the instant claims are to an acidulent.

Claim 33 is to chilling a nutriment with an acidulant and claim 34 is to a particular acidulant. Kemp et al. disclose the use of ground beef as in claim 35. Ground beef is usually kept cool before after it is processed (page 40, lines 15-33). Nothing new is seen in adding the acidulant to frozen foods as in claim 36 for its known function of preservation, which is the function of acidulants. It is well known that bacteria cannot grow below a pH of 4.5. Therefore, it would have been obvious to add acidulants to frozen or chilled foods.

Claims 37-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kemp et al. '469 or Iannotti in view of Canning as applied to the above claims, and further in view of Guthery (5,234,703).

Guthery discloses a process of killing bacteria on animal carcasses by spraying with a composition, which contains an acid. Then the carcass (nutriment) is put in chiller water (abstract and col. 12, lines 25-30). As the method has been shown as in claim 37, it would fulfill the intended use of increasing the rate of thermal inactivation of

a pathogen or increasing the shelf live of the products as in claim 41, because germs are killed at an early stage. Therefore, it would have been obvious to treat a nutriment with an acidulant to increase the rate of thermal inactivation of a pathogen or to increase the shelf life of a nutriment.

Kemp et al. disclose as in claim 38 the claimed acidulant. The reference discloses that it can be used as a preservative and in treating plant and animal products, which are heated (page 29, lines 5-15). Therefore, it would have been obvious to use a known acidulant as the acidulant of Guthery because it performs the same function of lowering the pH of the product.

The limitations of claims 39-43 have been discussed above and are obvious for those reasons.

ARGUMENTS

Applicant's arguments filed 10-13-04 have been fully considered but they are not persuasive.

Applicants argue that Canning discloses that the canning industry is concerned with complete sterilization of foods using an acidulant to shorten the time required for the sterilization of foods which can be eaten directly from the cans and that the claims require uncooked meat products which are not sterilized and are not ready to eat and that the treated uncooked meat products must still be cooked. However, Canning was used to show that it is known that the use of an acid lessens sterilization times of foods. This does not keep the acid from lessening the processing time anytime heat is used because acids in themselves lower the pH of the product and preserve food. In

addition, the reference is used in combination with Kemp who discloses using an untreated such as an acid with an acidulant (above). The independent claims do not state at what temperature the meat is heated or require that the uncooked meat is further cooked.

Applicants argue that the gram negative pathogens are inactivated in 30 to 75% less time using the claimed method. Nothing new is seen in this as it is known that heating of food kills pathogens, and that not fully cooking a food would not kill all the pathogens and that the use of an acid decreases the time required to kill pathogens (Canning).

Applicants argue that Guthery does not teach using acidulation to achieve 35 to 75% reduction in heating times for meats. However, it is used in combination with the other references. Certainly, chilling is another way to decrease the growth of pathogens in a food product, hence refrigeration. No claims are seen as to cooking the product by the consumer as argued, or as to cooking times by the consumer as the product could be cooked in a processing plant.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen F. Pratt whose telephone number is 571-272-1404. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Milton Cano, can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hp 11-10-04

HELEN PRATT
PRIMARY EXAMINER